EPCOS

SAW Components

Preliminary Data R901

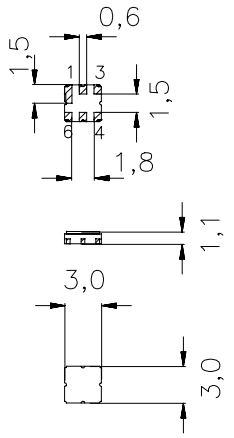


Preliminary Data

Ceramic package **DCC6C**

Features

- 1-port resonator
- Provides reliable, fundamental mode, quartz frequency stabilization i.e. in transmitters or local oscillators
- Hermetically sealed ceramic package
- Protection layer: Elpas
- AEC-Q200 qualified components family



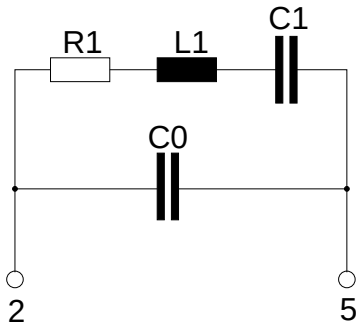
Dimensions in mm, approx. weight 0,037 g

Terminals

- Ni, gold plated

Pin configuration

2	Input
5	Output, grounded in 1-port conf.
1,3,4,6	Ground (case)



Type	Ordering code	Marking and Package according to	Packing according to
R901	B39321-R 901-U410	C61157-A7-A67	F61074-V8168-Z000

Electrostatic **S**ensitive **D**evice (**ESD**)

Maximum ratings

Operable temperature range	T_A	–40/+95	˚C	
Storage temperature range	T_{stg}	–40/+95	˚C	
DC voltage	V_{DC}	12	V	between any terminals
Source power	P_s	0	dBm	

Preliminary Data

Characteristics

Reference temperature: T_A = 25 °C
Terminating source impedance: Z_S = 50 Ω
Terminating load impedance: Z_L = 50 Ω

		min.	typ.	max.	
Center frequency [1]	f_c	314,925	315,000	315,075	MHz
Minimum insertion attenuation	α_{min}	—	1,4	1,8	dB
Unloaded quality factor	Q_U	7600	10800	—	
Ageing of f_c		—	—	–50/+50	ppm
Equivalent circuit elements					
Motional capacitance	C_1	—	2,445	—	fF
Motional inductance	L_1	—	104,4	—	µH
Motional resistance	R_1	—	19	27	Ω
Parallel capacitance [2]	C_0	—	3,30	—	pF
Temperature coefficient of frequency [3]	TC_f	—	–0,032	—	ppm/K^2
Turnover temperature	T_0	20	—	50	°C

[1] Center frequency is defined as maximum of the real part of the admittance

[2] If used in two port configuration (pin 1-input, pin 3-output) C_0 is reduced by approx. 0,3 pF.

[3] Temperature dependence of f_c: $f_c(T_A) = f_c(T_0)(1 + TC_f(T_A - T_0)^2)$

Published by EPCOS AG
Surface Acoustic Wave Components Division, SAW CE AE PD
P.O. Box 80 17 09, D-81617 München

© EPCOS AG 2005. All Rights Reserved. Reproduction, publication and dissemination of this brochure and the information contained therein without EPCOS' prior express consent is prohibited.

The information contained in this brochure describes the type of component and shall not be considered as guaranteed characteristics. Purchase orders are subject to the General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry recommended by the ZVEI (German Electrical and Electronic Manufacturers' Association), unless otherwise agreed.

This brochure replaces the previous edition.

For questions on technology, prices and delivery please contact the Sales Offices of EPCOS AG or the international Representatives.

Due to technical requirements components may contain dangerous substances. For information on the type in question please also contact one of our Sales Offices.